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**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**[Docket No. 170706630-7630-01]**

**RIN 0648-XF538**

**Fish and Fish Product Import Provisions of the Marine**

**Mammal Protection Act List of Foreign Fisheries**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of availability; request for comments.

**SUMMARY:** NMFS is publishing its draft List of Foreign Fisheries (LOFF) for 2017, as required by the regulations implementing the Fish and Fish Product Import Provisions of the Marine Mammal Protection Act (MMPA). The draft LOFF reflects available information on marine mammal interactions in commercial fisheries exporting fish and fish products to the United States. NMFS has classified each commercial fishery included in the draft LOFF into one of two categories based upon frequency and likelihood of incidental mortality and serious injury of marine mammals that is likely to occur incidental to each fishery. Fisheries are classified as either exempt or export. The

classification of a fishery on the draft and final LOFF will determine which regulatory requirements will be applicable to that fishery to enable the nation to receive a comparability finding necessary to export fish and fish products to the United States from that particular fishery. The draft LOFF can be found at

[www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html).

**DATES:** Written comments must be received by 5 p.m. Eastern Time on *[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]*.

**ADDRESSES:** You may submit comments on this document, identified by NOAA-NMFS-2017-0084, by either of the following methods:

1. *Electronic Submissions:* Submit all electronic comments via the Federal e-Rulemaking Portal. Go to [www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2017-0084](http://www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2017-0084), click the "Comment Now!" icon, complete the required fields and enter or attach your comments.

2. *Mail:* Submit written comments to: Director, Office of International Affairs and Seafood Inspection, Attn: MMPA List of Foreign Fisheries, NMFS, F/IASI, 1315 East-West Highway, Silver Spring, MD 20910.

*Instructions:* Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered. All comments received are a part of the public record and will generally be posted for public viewing on [www.regulations.gov](http://www.regulations.gov) without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe portable document file (PDF) formats only.

NMFS will consider all comments and information received during the comment period in preparing a final LOFF. NMFS will also seek input from nations on the draft LOFF at bilateral and multilateral meetings, as appropriate.

**FOR FURTHER INFORMATION CONTACT:** Nina Young, NMFS F/IASI at [Nina.Young@noaa.gov](mailto:Nina.Young@noaa.gov) or 301-427-8383.

**SUPPLEMENTARY INFORMATION:**

In August 2016, NMFS published a final rule (81 FR 54390; August 15, 2016) implementing the fish and fish

product import provisions (section 101(a)(2)) of the Marine Mammal Protection Act (MMPA). This rule established conditions for evaluating a harvesting nation's regulatory programs to address incidental and intentional mortality and serious injury of marine mammals in fisheries operated by nations that export fish and fish products to the United States.

Under this rule, fish or fish products cannot be imported into the United States from commercial fishing operations, which result in the incidental mortality or serious injury of marine mammals in excess of United States standards. Such fish and fish products from export and exempt fisheries identified by the Assistant Administrator for Fisheries in the LOFF can only be imported into the United States if the harvesting nation has applied for and received a comparability finding from NMFS. The rule established procedures that a harvesting nation must follow and conditions it must meet to receive a comparability finding for a fishery. The rule also established provisions for intermediary nations to ensure that such nations do not import and re-export to the United States fish or fish products that are subject to an import prohibition.

*What is the List of Foreign Fisheries?*

Based on information provided by nations, industry, the public, and other readily available sources, NMFS has identified nations with commercial fishing operations that export fish and fish products to the United States and has classified each of those fisheries based on their frequency of marine mammal interactions as either "exempt" or "export" fisheries (see definitions below). The entire list of these export and exempt fisheries, organized by nation (or subsidiary jurisdiction), constitutes the LOFF. *Why is the LOFF important?*

Under the MMPA, the United States prohibits imports of commercial fish or fish products caught in commercial fishing operations resulting in the incidental killing or serious injury (bycatch) of marine mammals in excess of United States standards (16 U.S.C. 1371(a)(2)). NMFS published regulations implementing these MMPA import provisions in August 2016 (81 FR 54390, August 15, 2016). The regulations apply to any foreign nation with fisheries exporting fish and fish products to the United States, either directly or through an intermediary nation.

The LOFF is an integral part of the process for implementing the import provisions of the MMPA. As described below, the LOFF lists foreign commercial

fisheries that export fish and fish products to the United States and that have been classified as either "export" or "exempt" based on the frequency and likelihood of interactions or incidental mortality and serious injury of marine mammal. A harvesting nation must apply for and receive a comparability finding for each of its export and exempt fisheries to continue to export fish and fish products from those fisheries to the United States. For all fisheries, in order to receive a comparability finding under this program, the harvesting nation must prohibit intentional killing of marine mammals in the course of commercial fishing operations in the fishery or demonstrate that it has procedures to reliably certify that exports of fish and fish products to the United States were not harvested in association with the intentional killing or serious injury of marine mammals.

*What do the classifications of "exempt fishery" and "export fishery" mean?*

The classifications of "exempt fishery" or "export fishery" determine the criteria that a particular nation's fishery must meet to receive a comparability finding for that fishery. A comparability finding is required for both exempt and export fisheries, but the criteria differ.

The criteria for an exempt fishery to receive a comparability finding are limited only to those conditions related to the prohibition of intentional killing or injury of marine mammals (see 50 CFR 216.24(h)(6)(iii)(A)). To receive a comparability finding, export fisheries, must comply with those criteria and also maintain regulatory programs comparable in effectiveness to the U.S. regulatory program for reducing incidental marine mammal bycatch (see 50 CFR 216.24(h)(6)).

*What is the five-year exemption period?*

NMFS included a five-year exemption period (which began 1 January, 2017) in this process to allow foreign harvesting nations time to develop, as appropriate, regulatory programs comparable in effectiveness to U.S. programs at reducing marine mammal bycatch. During this exemption period, NMFS, based on the final LOFF, and in consultation with the Secretary of State, will consult with harvesting nations with commercial fishing operations identified as export or exempt fisheries for purposes of notifying the harvesting nation of the requirements of the MMPA. NMFS will continue to urge harvesting nations to gather information about marine mammal bycatch in their commercial fisheries to inform the next draft and final

LOFF. NMFS will re-evaluate foreign commercial fishing operations and publish a notice of availability of the draft for public comment, and a notice of availability of the final revised LOFF in the *Federal Register* the year prior to the expiration of the exemption period (2020).

If, during the five-year exemption period, the United States determines that a marine mammal stock is immediately and significantly adversely affected by an export fishery, NMFS may use its emergency rulemaking authority to institute an import ban on these products.

*How will NMFS classify a fishery if a harvesting nation does not provide information?*

In instances where information on the commercial fishing operations and the frequency and likelihood of bycatch in a fishery has not been provided by the nation or is not readily available, NMFS may determine whether a fishery is an exempt or export fishery by evaluating the fishery using information such as fishing techniques, gear used, methods used to deter marine mammals, target species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors.



As anticipated, information on the frequency or likelihood of interactions or bycatch in most foreign fisheries was lacking or incomplete. In the absence of such information, NMFS used the information noted above to classify fisheries, which may include drawing analogies to similar U.S. fisheries and gear types interacting with similar marine mammal stocks. Where no analogous fishery or fishery information exists, NMFS classified the commercial fishing operation as an export fishery until such time as information comes available to properly classify the fishery. NMFS may reclassify a fishery if a harvesting nation provides, during the comment period, reliable information to reclassify the fishery or such information is readily available to NMFS in the course of preparing a revised LOFF.

#### **Instructions to Nations Reviewing the Draft LOFF**

In the LOFF, the vast majority, 3272 fisheries, are classified as export fisheries in accordance with 50 CFR 216.24(h) (3) and 216.3. To ensure the appropriate classification of their fisheries, nations should review the LOFF at [www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html)

together with this *Federal Register* notice carefully and submit detailed comments on their commercial fishing and processing operations. In this *Federal Register* notice, NMFS provides detailed information on the information reviewed to create the LOFF, the criteria used to classify a fishery as exempt or export, and the assumptions made to determine such classifications based on the information submitted or found readily available.

If a nation or entity wishes to advocate for a change in the classification of a fishery, the nation or entity should provide detailed information about the fishery, summaries of observer or logbook data, information on analogous fisheries where marine mammal bycatch may or may not occur, and detailed documentary evidence to support its claims, including, whenever possible, peer-reviewed data on marine mammal bycatch and impacts of bycatch to marine mammal population abundance. NMFS recommends that nations make specific edits in the appropriate column to the draft LOFF and provide references and supporting information.

#### *Instructions for Freshwater and Inland Fisheries*

Fisheries that occur solely in fresh water outside any marine mammal habitat, and inland aquaculture operations, are exempt from this rule. If any such fisheries have been

included in the LOFF, nations should indicate such fisheries and provide the necessary documentary evidence so NMFS can remove them from the LOFF as appropriate.

*Instructions for Data Sets Listed as "None Provided"*

Many nations either did not provide information or provided incomplete information. Where no information was provided, NMFS labelled that data set as "none provided." Nations are strongly encouraged to provide that information during the public comment period. In particular, NMFS is lacking information for many fisheries on gear type, area of operation, marine mammal species that a fishery may encounter or entangle as bycatch, and bycatch estimates for many species. This information is critical for properly classifying the fishery. When no information was provided, NMFS used other readily available information to define a fishery. Nations are urged to review both information supplied by the nation or discovered by NMFS, especially those nations that did not provide information or provided incomplete information.

NMFS also urges nations to provide the area of operation for both wild-caught fisheries and aquaculture operations for all the fisheries listed. It is particularly important for nations to provide information

on the location of aquaculture operations (e.g., open ocean, lagoon, or pond) and the type of aquaculture operation (e.g., pens, cages, or lines); without this information, NMFS cannot properly classify an aquaculture operation.

#### *Instructions for Reviewing Gear Type and Operational Areas*

In developing the LOFF, NMFS divided the fisheries by gear type because certain gears are documented as posing a greater risk of having marine mammal bycatch than others. Subdividing fishery information in this manner may not account for the actual or estimated number of vessels. Nations should review the number of vessels licensed to fish with a particular gear type and provide comments or revised estimates of vessels licensed to fish with that gear type.

Some fisheries in the LOFF are likely multi-species fisheries but are currently classified separately by fish species. If a fishery listed has multiple target species (e.g., demersal fish or large pelagics) and is represented more than once on the LOFF, nations should consider consolidating those fisheries to accurately reflect the multi-species nature of that fishery. For example, cod and haddock fisheries that are classified separately can be

designated as multispecies groundfish fishery (including cod, haddock, etc.). NMFS encourages nations to aggregate those fisheries that are listed separately into a broader fishery designation, as appropriate, and provide NMFS with a list of fish species that are captured in that fishery and its operational details (e.g., coastal pelagic gillnet fishery).

NMFS also urges nations to group or list fisheries, not based on the product exported but on the actual target species of the fishery. If an exported fish or fish product is not a target of a fishery but rather is a bycatch of that fishery, nations should note that information. NMFS prefers avoiding consolidating gear types together due to the different risk gear types pose to marine mammals, but would consider aggregating fisheries by target species or area, based on a nation's recommendations.

NMFS separated fisheries into specific areas of operation. Our experience indicates that marine mammal bycatch can differ depending on a fishery's area of operation and its overlap with marine mammal populations. NMFS urges nations to review the area of operation listed for each fishery and aggregate fisheries of the same gear type into larger areas of operation (e.g., encompassing

more bays or management zones) where appropriate. NMFS recommends avoiding collapsing areas into larger management areas unless it is appropriate to do so and would not result in a fishery with marine mammal bycatch disadvantaging one or more fisheries that do not pose the same level of risk.

*Instructions for high seas fisheries operating within a regional fishery management organization, intergovernmental agreement, or access agreement*

NMFS attempted to identify fisheries that are operating within a convention area of a regional fishery management organization (RFMO) or are associated with an intergovernmental agreement. NMFS requests that nations identify which fisheries are operating or authorized under an RFMO or intergovernmental agreement and provide information on conservation and management measures that specifically govern the bycatch of marine mammals in that organization. This information will further assist in the classification of fisheries and determinations related to future comparability findings.

Many nations have access agreements with other nations that permit them to fish within the EEZ or territorial waters of another nation (see annex on global tuna catch

and access agreements in supporting documents at [www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html)).

In most cases, nations did not provide information distinguishing between vessels permitted to fish in their own territorial waters from their national vessels fishing in distant waters under some type of access agreement. NMFS strongly encourages nation to identify which fisheries are operating under access agreements in distant waters or within the EEZ of another nation and the reporting requirements for such fisheries.

#### *Instruction for Nations that are Processing Fish and Fish Products*

For the purposes of identifying intermediary nations (discussed below), if a nation exports a fish or fish product to the United States for which it is only the processor, and the fish in that product is harvested elsewhere, NMFS strongly encourages nations or other entities to identify those products and the source fisheries and nations for those products. Providing this information will result in NMFS re-classifying a nation as an intermediary nation for that specific fish or fish product.

#### *Instructions for Fisheries with no Specific Target Species*

Nations will note that there are products for which NMFS has been unable to find information (e.g., gear type and area of operation), and there are fisheries that have been documented in the literature as having marine mammal bycatch associated with a nation and gear type but for which no target species of fish or fish products was identified. NMFS urges nations to provide the information that is lacking and as much detail as possible about the fishery, its operational characteristics, and its interactions with marine mammals, including applicable references.

*Instructions for which Fisheries should be Included in the LOFF*

NMFS urges nations to examine their exports to the United States over the last decade and include all fisheries which have, are, or may in the future be the source of fish and fish products exported to the United States. To ensure that no fisheries are overlooked in this process, nations should be as inclusive as possible. Nations or other entities should provide all the documentation and applicable references necessary to support any proposed modifications to the fisheries in the LOFF. Providing such information will ensure an accurate



classification of each fishery in the final LOFF and avoid requiring a nation to develop a regulatory program for a fishery classified as an export fishery because the nation failed to provide information.

#### *Instructions for Non-Nation Entities*

NMFS welcomes the input of the public, non-governmental organizations, and scientists. These entities can provide critical information about marine mammal bycatch in global fisheries and efforts to mitigate such bycatch. NMFS requests that when such entities comment on the LOFF, they provide as much detail and supporting documentary evidence as possible. While there are references in the literature to marine mammal bycatch in certain foreign fisheries, it may be that fish and fish products originating from those fisheries are not exported to the United States (e.g., artisanal or coastal fisheries for domestic consumption). NMFS would like to receive information on which fish and fish products are exported to the United States and the frequency of marine mammal interactions or bycatch in those fisheries.

#### *Further Direction and Instructions*

NMFS urges all nations and all stakeholders to review the criteria, assumptions, and global classifications that

follow in this Federal Register notice, to more completely understand the classifications and rationale in the LOFF.

## **Definitions**

*What is a "comparability finding?"*

A comparability finding is a finding by NMFS that the harvesting nation for an export or exempt fishery has met the applicable conditions specified in the regulations (see 50 CFR 216.24(h)) subject to the additional considerations for comparability findings set out in the regulations. A comparability finding is required for a nation to export fish and fish products to the United States. In order to receive a comparability finding for an export fishery, the harvesting nation must maintain a regulatory program with respect to that fishery that is comparable in effectiveness to the U.S. regulatory program for reducing incidental marine mammal bycatch. This may be met by maintaining a regulatory program that includes measures that are comparable, or that effectively achieve comparable results, to the regulatory program under which the analogous U.S. fishery operates.

*What is the definition of an "export fishery?"*

The definition of export fishery can be found in the implementing regulations for section 101(a)(2) of the MMPA

(see 50 CFR 216.3). NMFS considers "export" fisheries to be functionally equivalent to Category I and II fisheries under the U.S. regulatory program (see definitions at 50 CFR 229.2). The definition of an export fishery is summarized below.

NMFS defines "export fishery" as a foreign commercial fishing operation determined by the Assistant Administrator to be the source of exports of commercial fish and fish products to the United States that have more than a remote likelihood of incidental mortality and serious injury of marine mammals in the course of its commercial fishing operations.

Where reliable information on the frequency of incidental mortality and serious injury of marine mammals caused by the commercial fishing operation is not provided by the harvesting nation, the Assistant Administrator may determine the likelihood of incidental mortality and serious injury as more than remote by evaluating information concerning factors such as fishing techniques, gear used, methods used to deter marine mammals, target fish species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the

species and distribution of marine mammals in the area, or other factors.

Commercial fishing operations not specifically identified in the current LOFF as either exempt or export fisheries are deemed to be export fisheries until a revised LOFF is posted, unless the harvesting nation provides the Assistant Administrator with information to properly classify the foreign commercial fishing operation. The Assistant Administrator may also request additional information from the harvesting nation, as well as consider other relevant information about such commercial fishing operations and the frequency of incidental mortality and serious injury of marine mammals, to properly classify the foreign commercial fishing operation.

*What is the definition of an "exempt fishery?"*

The definition of exempt fishery can be found in the implementing regulations for section 101(a)(2) of the MMPA (see 50 CFR 216.3). NMFS considers "exempt" fisheries to be functionally equivalent to Category III fisheries under the U.S. regulatory program (see definitions at 50 CFR 229.2). The definition of an exempt fishery is summarized below.

NMFS defines an exempt fishery as a foreign commercial fishing operation determined by the Assistant Administrator

to be the source of exports of commercial fish and fish products to the United States that have a remote likelihood of, or no known, incidental mortality and serious injury of marine mammals in the course of commercial fishing operations. A commercial fishing operation that has a remote likelihood of causing incidental mortality and serious injury of marine mammals is one that, collectively with other foreign fisheries exporting fish and fish products to the United States, causes the annual removal of:

(1) Ten percent or less of any marine mammal stock's bycatch limit, or

(2) More than ten percent of any marine mammal stock's bycatch limit, yet that fishery by itself removes one percent or less of that stock's bycatch limit annually, or

(3) Where reliable information has not been provided by the harvesting nation on the frequency of incidental mortality and serious injury of marine mammals caused by the commercial fishing operation, the Assistant Administrator may determine whether the likelihood of incidental mortality and serious injury is "remote" by evaluating information such as fishing techniques, gear used, methods to deter marine mammals, target fish species,

seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors at the discretion of the Assistant Administrator.

A foreign fishery will not be classified as an exempt fishery unless the Assistant Administrator has reliable information from the harvesting nation, or other information to support such a finding.

### **Developing the 2017 Draft List of Foreign Fisheries**

*How is the List of Foreign Fisheries organized?*

NMFS organized the LOFF by harvesting nation (or subsidiary jurisdiction), then exempt fisheries, export fisheries, and export fisheries with no information. The fisheries listed contain defining factors including geographic location of harvest, gear-type, target species or a combination thereof. The LOFF also includes a list of the marine mammals that interact with each commercial fishing operation, where known, and, when available, indicates the level of incidental mortality and serious injury of marine mammals in each commercial fishing operation.

*What sources of information did NMFS use to classify the commercial fisheries included in the draft LOFF?*

NMFS reviewed and considered documentation provided by nations; the public; and other sources of information, where available, including fishing vessel records; reports of on-board fishery observers; information from off-loading facilities, port-side government officials, enforcement, transshipment vessel workers and fish importers; government vessel registries; RFMOs or intergovernmental agreement documents, reports, national reports, and statistical document programs; appropriate catch certification programs; Food and Agricultural Organization (FAO) documents and profiles; and published literature and reports on commercial fishing operations with intentional or incidental mortality and serious injury of marine mammals. NMFS has used these sources of information and any other readily available information to classify the fisheries as "export" or "exempt" fisheries to develop the LOFF.

*How did NMFS obtain the information used to classify fisheries included in the draft LOFF?*

First, NMFS identified imports of fish and fish products by nation using the U.S. foreign trade database for commercial fisheries imports found at: <http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/>. Second, in December 2016 NMFS notified in writing

each nation with commercial fishing or processing operations that export fish or fish products to the United States to request that within 90 days of notification, by April 1, 2017, the nation submit information about commercial fishing or processing operations. NMFS included in that notification a list of fish and fish products imported into the United States from that nation during the past several years.

For commercial fishing operations, NMFS requested information on the number of participants, number of vessels, gear type, target species, area of operation, fishing season, and any information regarding the frequency of marine mammal incidental mortality and serious injury, including programs to assess marine mammal populations or bycatch. NMFS also requested that nations submit copies of any laws, decrees, regulations, or measures to reduce incidental mortality and serious injury of marine mammals in their commercial fishing operations or prohibit the intentional killing or injury of marine mammals.

NMFS also evaluated information submitted by the nations and the public in response to *Federal Register Notice* (82 FR 2961, January 10, 2017) seeking information on foreign commercial fishing operations that export fish



and fish products to the United States and the frequency of incidental and intentional mortality and serious injury of marine mammals in those fisheries.

*How did NMFS determine which species or stocks are included as incidentally or intentionally killed or seriously injured in a fishery?*

The LOFF includes a list of marine mammal species and/or stocks incidentally or intentionally killed or injured in a commercial fishing operation. The list of species and/or stocks incidentally or intentionally killed or injured includes "serious" and "non-serious" documented injuries and interactions with fishing gear, including interactions such as depredation.

NMFS reviewed information submitted by nations and readily available scientific information including co-occurrence models demonstrating distributional overlap of the commercial fishing operations and marine mammals to determine which species or stocks to include as incidentally or intentionally killed or seriously injured in or interacting with a fishery. NMFS also reviewed, when available, injury determination reports, bycatch estimation reports, observer data, logbook data, disentanglement network data, fisher self-reports, and the information

referenced in the definition of exempt and export fishery (see above or 50 CFR 216.3).

*How often will NMFS revise the List of Foreign Fisheries?*

NMFS has developed this draft LOFF and intends to publish a notice of the availability of the final LOFF in the *Federal Register* by January 1, 2018. NMFS will re-evaluate foreign commercial fishing operations and publish a notice of availability of the draft for public comment, and a notice of availability of the final revised LOFF in the *Federal Register* the year prior to the expiration of the exemption period (2020). NMFS will revise the final LOFF, as appropriate, and publish a notice of availability in the *Federal Register* every four years thereafter. In revising the list, NMFS may reclassify a fishery if new, substantive information indicates the need to re-examine and possibly reclassify a fishery. After publication of the LOFF, if a nation wishes to commence exporting fish and fish products to the United States from a fishery not on the LOFF, that fishery will be classified as an export fishery until the next LOFF is published and will be provided a provisional comparability finding for a period not to exceed twelve months. If a harvesting nation can provide the reliable information necessary to classify the

commercial fishing operation at the time of the request for a provisional comparability finding or prior to the expiration of the provisional comparability finding, NMFS will classify the fishery in accordance with the definitions. The provisions for new entrants are discussed in the regulations implementing section 101(a)(2) of the MMPA (see 50 CFR 216.24(h)(8)(vi)).

*How can a classification be changed?*

To change a fishery's classification, nations or other interested stakeholders must provide observer data, logbook summaries, or reports that specifically indicate the presence or absence of marine mammal interactions, quantify such interactions wherever possible, provide additional information on the location and operation of the fishery (e.g., nearshore in less than three meters of water), details about the gear type and how it is used, maps showing the distribution of marine mammals and the operational area of the fishery; information regarding marine mammal populations and the biological impact of that fishery on those populations, and/or any other documentation that clearly demonstrates that a fishery is either an export or exempt fishery.

## **The Intersection of the LOFF and Other Statutes Certifying Bycatch**

*What is the relationship between the MMPA import rule, the LOFF, and the affirmative finding process and yellowfin tuna purse seine fisheries in the eastern tropical Pacific Ocean?*

Dolphin (family *Delphinidae*) incidental mortality and serious injury in eastern tropical Pacific yellowfin tuna purse seine fisheries are covered by section 101(a)(2)(B) and Title III of the MMPA (16 U.S.C. 1371(a)(2)(B) and 16 U.S.C. 1411-1417), implemented at 50 CFR 216.24(a)-(g). Nations must still comply with those provisions and receive an affirmative finding in order to export tuna to the United States. Tuna purse seine fishing vessels fishing for tuna with a carrying capacity of 400 short tons or greater that are governed by the Agreement for the International Dolphin Conservation Program (AIDCP) are not included in the LOFF, and are not required to apply for and receive a comparability finding. Purse seine vessels under 400 short tons and vessels using all other gear types operating in the eastern tropical Pacific must comply with the MMPA import rule. These fisheries are included in the LOFF and must apply for and receive a comparability finding.

*What is the intersection of the U.S. shrimp certification program (Section 609 of Public Law 101-162) with the MMPA import rule?*

Section 609 of Public Law 101-162 ("Sec. 609") prohibits imports of certain categories of shrimp unless the President annually certifies to the Congress by May 1, 1991, and annually thereafter, that either: (1) the harvesting nation has adopted a program governing the incidental taking of sea turtles in its commercial shrimp fishery comparable to the program in effect in the United States and has an incidental take rate comparable to that of the United States; or (2) the particular fishing environment of the harvesting nation does not pose a threat of the incidental taking of sea turtles. On May 1, 2017, the Department of State certified that 13 shrimp-harvesting nations and four fisheries have a regulatory program comparable to that of the United States governing the incidental taking of the relevant species of sea turtles in the course of commercial shrimp harvesting and that the particular fishing environments of 26 shrimp-harvesting nations, one economy, and three fisheries do not pose a threat of the incidental taking of covered sea turtles in the course of such harvesting (83 FR 21295 May 5, 2017).

All nations exporting wild-caught shrimp and shrimp products to the United States, regardless of whether they are certified under this provision, must also comply with the MMPA import rule, be included on the LOFF, and have a comparability finding. Nations in compliance with the MMPA import rule, but not certified under Public Law 101-162, cannot export wild-caught shrimp to the United States.

**Classification Criteria, Rationale, and Process used to Classify Fisheries**

*Process when Incidental Mortality and Serious Injury Estimates and Bycatch Limits are Available*

If estimates of the total incidental mortality and serious injury were available and a bycatch limit calculated for a marine mammal stock, NMFS used the quantitative and tiered analysis to classify foreign commercial fishing operations as export or exempt fisheries under the category definition within 50 CFR 229.2 and the procedures used to categorize U.S. fisheries as Category I, II, or III, at

<http://www.nmfs.noaa.gov/pr/interactions/lof/>.

*Process When Only Incidental Mortality and Serious Injury Estimates Were Available*

In the majority of cases, however, NMFS either did not receive any information or found that the information provided was incomplete, lacking detail regarding marine mammal interactions, and lacking quantitative information on the frequency of interactions. Where nations provided estimates of bycatch (incidental or intentional mortality or serious injury) or NMFS found estimates of bycatch in published literature, national reports, or through other readily available sources, NMFS classified the fishery as an export fishery if the information indicated that there was a likelihood that the mortality and serious injury was more than remote. The code or designation in the LOFF for the determination "presence of bycatch" is recorded as "P" in the LOFF.

*Alternative Approaches When Estimates of Marine Mammal Bycatch are Unavailable*

Because bycatch estimates were lacking for most fisheries, NMFS relied on three considerations to assess the likelihood of bycatch or interaction with marine mammals, including: (1) co-occurrence, the spatial and seasonal distribution and overlap of marine mammals and fishing operations; (2) analogous gear, evaluation of records of bycatch and assessment of risk, where such

information exists, in analogous U.S. and international fisheries or gear types; and (3) overarching classifications, evaluation of gears and fishing operations and their risk of marine mammal bycatch (see section below for further discussion). Published scientific literature provides numerous risk assessments of marine mammal bycatch in fisheries, routinely using these approaches to estimate marine mammal mortality rates, identify information gaps, set priorities for conservation, and transfer technology for deterring marine mammals from gear and catch. Findings from the most recent publications cited in this *Federal Register* notice, often demonstrate level of risk by location, season, fishery, and gear. A summary of the information used to support the designations described below is available in the annotated bibliography and the expanded LOFF with references and comments, at [www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html).

#### *Co-occurrence Evaluation*

The co-occurrence of marine mammal populations with a commercial fishing operation can be a measure of risk. NMFS evaluated, when available, the distribution and spatial overlap of marine mammal populations and commercial fishing operations to determine whether the probability for



marine mammal interactions or bycatch in that fishery is more than remote. Resources that NMFS used to consider co-occurrence include OBIS-SEAMAP <http://seamap.env.duke.edu/>, [http://www.hsi.org/assets/pdfs/mapping\\_marine\\_mammals.pdf](http://www.hsi.org/assets/pdfs/mapping_marine_mammals.pdf) and [http://www.conservationecologylab.com/uploads/1/9/7/6/19763887/lewison\\_et\\_al\\_2014.pdf](http://www.conservationecologylab.com/uploads/1/9/7/6/19763887/lewison_et_al_2014.pdf). Additional sources in peer reviewed literature that provide documentation of co-occurrence are Komoroske & Lewison 2015; FAO 2010; Watson et al. 2006; Read et al., 2006; Reeves et al., 2004. The code or designation for "co-occurrence" is recorded as "C/O" in the LOFF.

#### *Analogous Gear Evaluation*

Where a nation did not provide documentation or information was not readily available on the amount of marine mammal bycatch in a fishery or the co-occurrence, NMFS classified a fishery as exempt or export by analogy to similar U.S. or international fisheries and gear types interacting with similar marine mammal stocks. NMFS consulted the United States' domestic MMPA List of Fisheries when classifying by analogy international fisheries [http://www.nmfs.noaa.gov/pr/interactions/fisheries/2017\\_lis](http://www.nmfs.noaa.gov/pr/interactions/fisheries/2017_lis)

*t\_of\_fisheries\_lof.html*. NMFS also evaluated other relevant information including, but not limited to: fishing techniques, gear used, methods used to deter marine mammals, target fish species, seasons and areas fished, qualitative data from logbooks or fisher reports, stranding data, the species and distribution of marine mammals in the area, or other factors. The code or designation for the determination "analogous gear" is recorded as "A/G" in the LOFF. Gear types commonly used in U.S. fisheries, such as longline, gillnet, purse seine, trawl, and pot/trap, were identified as "analogous gear" in the justification section of the LOFF. Gear types not commonly used in U.S. waters, such as Danish seine, ring nets, lift nets or large pound nets off Southeast Asia, however, could not be compared to an analogous gear or fishery in the United States.

#### *Classification in the Absence of Information*

When no analogous gear, fishery, or fishery information existed, or insufficient information was provided by the nation, and information was not readily available, NMFS classified the commercial fishing operation as an export fishery per the definition of "export fishery" at 50 CFR 216.3. These fishing operations will remain classified as export fisheries until the harvesting nation

provides the reliable information necessary to classify properly the fishery or, in the course of revising the LOFF, such information becomes readily available to NMFS. The code or designation for the determination "no information" is recorded as "N/I" in the LOFF.

*Multiple Codes and Additional Terms in the LOFF*

In some cases, NMFS recorded multiple codes as the rationale for a fishery classification. For example, NMFS may have received insufficient information from a nation, still lacks information in some columns, yet classified the fishery by analogy. In that instance, the codes used to classify the fishery would be: "N/I, A/G."

Additional terms in the LOFF include "none provided," "no information," and "none documented". "None provided" indicates the nation did not provide information and no information could be found through research and literature searches. "None documented" indicates that neither the nation nor reference material have documented interactions with marine mammals either through observers or logbooks. "No information" indicates that the nation provided information but did not specifically provide information on the marine mammal species interacting with a fishery or estimates of marine mammal bycatch.

## Overarching Classifications

Below is a discussion of the overarching fishery classifications of gillnets, longlines, purse seines, trawls, and aquaculture, and their interactions with marine mammals.

### *Gillnets*

Because the available information indicates that there is a likelihood that the mortality and serious injury caused by gillnets is more than remote, NMFS has classified all gillnet fisheries as export fisheries in the draft LOFF. Several U.S. gillnet fisheries, which are analogous to some fisheries considered in the LOFF, have been categorized as Category I fisheries under the MMPA. Records show that between 1990 and 2011, bycatch in gillnets continues to affect many dolphins (*odontocetes*); namely 56 of the 74 recognized species (75%) have been bycaught in gillnets (Reeves *et al.* 2013). Additionally, records indicate that nine species of the 14 recognized species of whales have been bycaught in gillnets. For seals and sea lions, 14 of the 18 extant species of *phocid* seals were captured in gillnets; and of the 14 species of *otariid* seals and sea lions (including one extinct species), seven have been bycaught in gillnets (Reeves *et al.* 2013). Since

1990, marine mammal bycatch in gillnets has increased and consistently poses a significant risk to marine mammals (Reeves *et al.* 2013). In particular, Lewison *et al.* (2014) found that gillnets for finfish have high bycatch intensity in various fishing regions of the world.

International and regional marine mammal and fishery management organizations such as ACCOBAMS (2008), ASCOBANS (2009), CMS (2011), FAO (2000), ICES (2013), IOTC (2014), and IWC (2004) have conducted workshops, collected information, and published findings documenting the high risk gillnets pose to marine mammals.

Based on the available information, NMFS has designated all gillnet fisheries as export fisheries. Nations wishing to challenge this designation must provide observer or logbook data sufficient to refute this determination. When possible, NMFS requests nations provide documentation that demonstrates that a gillnet fishery poses a remote likelihood of incidental mortality and serious injury to marine mammals.

#### *Longlines*

Because the available information indicates that there is a likelihood that the mortality and serious injury caused by longlines is more than remote, NMFS classified

all longline fisheries as export fisheries. U.S. longline fisheries, which are analogous to some fisheries considered in the LOFF, have been categorized as Category I fisheries under the MMPA.

In longline fisheries, hooking, entanglement, and boat strikes account for some mortality and serious injury, but not all interactions or depredation may have this result. Interactions of marine mammals with longline fisheries are likely to be under-reported (Clarke 2014). Though not as great a threat for cetaceans globally as compared with other gear types, longline bycatch is a threat to several species and populations, including false killer whales (*Pseudorca crassidens*), Risso's dolphin (*Grampus griseus*), and pilot whales (*Globicephala spp.*) in the Northwest Atlantic (Werner 2015). Killer whales (*Orcinus orca*) and sperm whales (*Physeter macrocephalus*) appear to be the main species involved with demersal longline fisheries at higher latitudes, while false killer whales (*Pseudorca crassidens*) and pilot whales (*Globicephala spp.*) appear to be the primary species involved with pelagic longline fisheries at lower latitudes (Hamer 2012).

In a 2010 bycatch workshop with tuna RFMOs, the FAO found that progress on quantifying tuna RFMO fishery

impacts on marine mammal populations and related progress in mitigating or reducing the mortality has been slow, because the priority for fishers is the adoption of measures to reduce or eliminate depredation and gear damage (FAO 2010). In tuna longline fisheries, which represent a significant portion of fisheries that export seafood to the United States, cetaceans are occasionally entangled and hooked. Any entanglement could be mitigated by the use of voluntary or mandated best practices to avoid bycatch by the tuna fishing industry; however, to date, the application of such techniques has been limited (Gilman 2011).

Only through an evaluation of the bycatch rate and a determination of overall risk of bycatch associated with longline fishing can definitive case-by-case classifications be made for longline fisheries. NMFS invites nations who are parties and cooperating non-parties to RFMOs to join us in urging their respective RFMOs to undertake, as a research priority, such a risk assessment and analyze logbook and observer data to analyze the marine mammal bycatch risk posed by longline fisheries.

NMFS designated all longline fisheries as export fisheries. Nations wishing to challenge this designation

must provide observer or logbook data sufficient to refute this determination. When possible, NMFS requests that nations provide documentation that demonstrates that a longline fishery poses a remote likelihood of incidental mortality and serious injury to marine mammals.

#### *Purse Seines*

Because the available information indicates that there is a likelihood that the mortality and serious injury caused by purse seines is more than remote, NMFS classified several types of purse seine fisheries as export fisheries. Purse seine gear is documented to have marine mammal bycatch globally (Anderson 2014, Hall 2013, NOAA Tech Memo 2011). A portion of tuna exported to the United States is captured with purse seines, documented to have marine mammal bycatch (Anderson 2014, Gilman 2011, IOTC 2010). Marine mammal interactions have been documented in purse seine fisheries other than those for tuna, including anchovy (Gonzales 2015), sardine (Prajith 2014), and small scale coastal fisheries for various species (Mustika, 2014, Kiszka 2008).

Purse seine fisheries for tuna are, with some exceptions, managed through RFMOs according to agreements entered into by member nations. Five tuna RFMOs manage



fisheries in the Southern Ocean, Indian Ocean, Eastern Tropical Pacific, Western and Central Pacific, and Atlantic. Only three RFMOs have adopted measures to mitigate marine mammal bycatch in purse seine fisheries or prohibit entirely the intentional encirclement of marine mammals with purse seines. Specifically, the Inter-American Tropical Tuna Commission serves as the secretariat for the International Dolphin Conservation Program; the Indian Ocean Tuna Commission prohibits members from intentionally setting on cetaceans; and the Western and Central Pacific Fisheries Commission also prohibits intentionally setting on schools associated with cetaceans, and requires reasonable steps to ensure safe release of marine mammals. The International Commission for the Conservation of Atlantic Tunas and the Commission for the Conservation of Southern Bluefin Tuna do not prescribe marine mammal conservation measures.

NMFS designated most non-tuna purse seine fisheries as export fisheries. Purse seine fisheries outside tuna RFMO areas of jurisdiction are designated as export fisheries. Tuna fisheries within the jurisdiction of RFMOs lacking measures that prohibit intentional encirclement are export fisheries. Tuna fisheries within the jurisdiction of RFMOs

with measures that prohibit intentional encirclement are exempt fisheries, unless information submitted by nations or readily available scientific information shows that the fishery has more than a remote likelihood of incidental mortality and serious injury of marine mammals in the course of its commercial fishing operations. Nations wishing to challenge these designations must provide observer or logbook data sufficient to refute this determination. When possible, NMFS requests nations provide documentation that demonstrates that purse seine gear in a particular fishery poses a remote likelihood of incidental mortality and serious injury to marine mammals.

#### *Trawl*

Because the available information indicates that there is a likelihood that the mortality and serious injury caused by trawl fisheries is more than remote, NMFS classified several types of trawl fisheries as export fisheries. U.S. trawl fisheries with marine mammal bycatch, which are analogous to some fisheries considered in the LOFF have been categorized as Category II fisheries under the MMPA.

Trawl fisheries, including bottom, mid-water, and pelagic trawls, have been documented to globally interact

with marine mammals (Peltier et al. 2016, Komoroske & Lewison 2015, Read 2014, Brown 2014). Pinnipeds are more likely to be entangled in industrial pair and pelagic trawl fisheries (Machado 2015, Lobao-Tello et al. 2013). ICES (2010) has identified pelagic trawl nets as posing a risk of cetacean bycatch. Northridge et al. (2011) documented bycatch of harbor porpoises, bottlenose dolphins, common dolphins, pilot whales, minke whales, grey and harbor seals in mid-water and pair trawl fisheries in the North Atlantic. Trawl bycatch intensity was found to be higher in certain regions (Lewison et al. 2014).

Nations wishing to challenge that designation must provide observer or logbook data sufficient to refute this determination. When possible, NMFS requests nations provide documentation that demonstrates that a trawl fishery poses a remote likelihood of incidental mortality and serious injury to marine mammals.

#### *Aquaculture*

Based on the available information, NMFS has designated most aquaculture operations for which nations submitted information as exempt fisheries unless there is a record of entanglement or intentional killing in such aquaculture operations. Because the MMPA import rule applies to

aquaculture facilities sited in marine mammal habitat, where deterrence measures (e.g., anti-predator nets) may incidentally or intentionally kill and seriously injury marine mammals, NMFS evaluated an array of aquaculture operations, some of which have no analogous operations or characteristics to operations in the United States.

Aquaculture operations for finfish (especially salmon), mollusks, seaweed, and other species are proliferating globally. Since 1990, annual production of salmonid farms has increased from 299,000 to 1,900,000 tons (FAO 2012), and accompanying this expansion has been an increase in conflicts with marine mammals, especially pinnipeds.

Pinniped depredation is a major problem at many aquaculture facilities in Europe, Chile, Australia, and South Africa (Kemper *et al.* 2003). Some nations use anti-predator nets as a deterrent.

In some aquaculture operations, bycatch of marine mammals in anti-predator nets occurs occasionally, although direct killing, harassment, and exclusion from preferred habitat may pose more serious problems for marine mammal populations (Kemper *et al.* 2003). Fatal entanglements of *odontocetes* in aquaculture anti-predator nets appear to be infrequent; however, dolphin deaths in such nets have been

reported from salmon and tuna facilities in Australia and Chile (Kemper *et al.* 2003).

Literature documenting marine mammal interactions and the risk of marine mammal interactions with aquaculture equipment, or fish cages is lacking. For net pens and fish cages, the most damaging marine mammal interactions are with pinnipeds, while dolphins, porpoises and whales are viewed as a minor threat. Dolphins have been documented feeding on wild fish attracted to marine fish farms off Italy but were not reported to predate the caged fish (Díaz López *et al.* 2005). In a five-year study of Italian sea bass, sea bream, and meagre cages, Díaz López (2012) observed individually identified dolphins to assess patterns of habitat use and farm fidelity. Dolphins near farms typically foraged on wild fish concentrated in the farm but also fed on discarded or escaping fish during harvesting operations. Annual dolphin mortality was 1.5 per year, and five animals were found entangled in nets during the study period. The potential for marine mammals to become entangled and drown in farm structures or lines is a concern (Würsig and Gailey 2002). From surveys at marine fish farms off Italy, Díaz López and Shirai (2007)

estimated one bottlenose dolphin mortality per month due to entanglement with farm nets.

Mussel aquaculture is a growing industry, with coastal and offshore waters being utilized for mussel aquaculture farms. This form of aquaculture uses ropes in the water column that pose an entanglement risk to marine mammals, particularly whales, although the extent of the risk is undetermined. In 2015, a Pacific right whale was documented entangled in, but successfully disentangled and released from, the grow-out ropes of mussel farm gear in Korea (Young, 2015). A Bryde's whale was entangled in mussel spat lines off the coast of New Zealand (Lloyd 2003). A humpback calf was found entangled in mussel spat-collecting rope off Western Australia but was disentangled and released (Groom & Coughran, 2012). Finally, a humpback whale died from entanglement in single dropper spat-collectors at an experimental mussel farm in northwest Iceland (Young, 2015). Given this information, the placement of aquaculture farms in waters that are critical habitats and migratory routes for endangered species, can increase the risk of entanglements, and in so doing can change the classification of the aquaculture operation.

Review of the NMFS U. S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (Waring et al. 2012, 2015) finds very few verified instances of marine mammals being injured by or entangled in aquaculture gear. U.S aquaculture facilities are Category III fisheries, because there are no known incidental mortalities or serious injuries of marine mammals in these operations, and they are considered to have a remote likelihood of marine mammal interactions. Therefore, by analogy, NMFS is proposing to classify all aquaculture operations for which nations provided information (or for which scientific information is readily available) as exempt in the LOFF, absent information and evidence that a particular aquaculture operation has more than a remote likelihood of incidental mortality and serious injury of marine mammals, NMFS is seeking comment on this classification. However, NMFS has classified as export fisheries aquaculture facilities with a record of entanglement or a history of intentional killing. A harvesting nation must demonstrate that all aquaculture operations, regardless of their classification, sited in marine mammal habitat or interacting with marine mammals, are prohibited from the intentional killing or serious injury of marine mammals in the course of

aquaculture operations or have established procedures to reliably certify that exports of fish and fish products to the United States are not the product of an intentional killing or serious injury of a marine mammal.

While NMFS desires more information about the environmental risk of these operations, particularly mussel rope and cage aquaculture, to marine mammals and urges the industry to develop mitigation techniques to avoid potential entanglements or reduce their severity, the documented interactions have been mostly non-life threatening. Nevertheless, in developing the LOFF, NMFS has evaluated, and will continue to evaluate, aquaculture operations on a case-by-case basis, considering the operation's measures to reduce interactions, prohibit intentional mortality, and reduce incidental mortality and serious injury of marine mammals (e.g., use of anti-predator nets and the prohibition on intentional killing).

**Fisheries or Gear Types Excluded from this Rule or that are Generally Listed as Exempt**

In the implementing regulations and the LOFF, NMFS has defined "*commercial fishing operation*" as: vessels or entities that catch, take, or harvest fish (as defined in section 3 of the Magnuson-Stevens Fishery Conservation and



Management Act (16 U.S.C. 1802)) from the marine environment (or other areas where marine mammals occur) that results in the sale or barter of all or part of the fish caught, taken or harvested. The term includes aquaculture activities that interact with or occur in marine mammal habitat. Consequently, this rule does not apply to any land-based or freshwater aquaculture operations; these commercial fishing operations do not occur in marine mammal habitat.

Additionally, there are several gear types in the U.S. List of Fisheries that are consistently and broadly classified as category III fisheries with no documented marine mammal catch (see [http://www.nmfs.noaa.gov/pr/interactions/fisheries/2016\\_list\\_of\\_fisheries\\_lof.html#table3\\_cat3](http://www.nmfs.noaa.gov/pr/interactions/fisheries/2016_list_of_fisheries_lof.html#table3_cat3)). NMFS has classified those fisheries as Category III because there are often no known incidental mortalities or serious injuries of marine mammals in these fisheries, and there is a remote likelihood of marine mammal mortalities and serious injuries given that the fishing method or gear is highly selective. These include:

• handline	• harpoon	• hook and line
• pole and line	• spearfishing	• aquarium collecting
• cast net	• hand collection	• loop net

• rake/tongs	• diving	
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By analogy, NMFS classified these gear types as exempt in the LOFF.

*What was the process for notification and the classification for fisheries where nations failed to provide information?*

NMFS first informed nations of the requirements of the MMPA import rule and the process to develop the LOFF via a cable sent to all trading partners in September 2016. On December 21, 2016, NMFS sent a letter to the Washington, D.C. embassy of each trading partner officially requesting the information needed to create the LOFF. The letter included explicit details about the type of information needed. From March through June 2017, NMFS followed up on these requests by phone, emails, and in some cases, visits to embassies in the United States, requesting information on nation's fisheries that export to the United States. Additionally, NMFS searched readily available information, including FAO documents, in an attempt to classify fisheries for which nations failed to provide sufficient information or provided no information at all. If nations submit information during this comment period on the draft

LOFF, NMFS will consider this information when developing the final LOFF.

As discussed above, NMFS classified as export fisheries all fisheries from nations that failed to respond to requests for information or provided insufficient information about a fishery and for which information was not readily available as stipulated in the implementing regulations defining export and exempt fishery (see 50 CFR 216.3 Definitions of Export and Exempt Fishery).

#### **Nations that Failed to Provide Information**

The following nations failed to provide information on their fisheries, and NMFS did not find available information to classify their fisheries; consequently, NMFS classified all these nations' fisheries as export fisheries (see 50 CFR 216.3 Definitions of Export and Exempt Fishery).

- British Virgin Islands (BVI) failed to provide data for exports of marine fish, toothfish, snapper and squid. BVI maintains that it does not export fish and fish products to the United States.
- Cameroon failed to provide data for exports of groundfish (cod, cusk, haddock, hake, pollock, sole), mackerel, herring, snail, mussels, oysters, crawfish, crustaceans, tilapia, and shrimp. These species may be harvested with longlines and gillnets. Indications of marine mammal bycatch in longlines (Werner 2014) and gillnets (Ayissi et al. 2014) are documented; however,

the target species for these gear types are not identified in the literature for Cameroon.

- China also did not provide information, and the data readily available and used to classify China's fisheries that export to the United States may not accurately characterize existing aquaculture operations, processing operations, and wild-capture fisheries.
- Haiti failed to provide data for exports of conch, coral, crab, lobster, molluscs, sea cucumbers, and shrimp. Haiti has not exported fish or fish products to the United States since 2012.

### **Classification for Fisheries of Nations Identified as**

#### **Solely Intermediary Nations**

NMFS defines an intermediary nation as a nation that imports fish or fish products from a fishery on the LOFF and re-exports such fish or fish products to the United States. To prevent any fish or fish products subject to import prohibitions authorized by the MMPA import rule from being imported into the United States from any intermediary nation, including a processing nation, NMFS includes provisions for intermediary nations (see 50 CFR 216.24 (h) (9) (iv)). NMFS requested that intermediary nations provide information on the fisheries and nations that are the source of any imported product that they process and export to the United States. Many nations failed to provide this information; NMFS continues to urge them to do so.

Based on the information received or obtained, the following nations are solely intermediary nations: Belarus, Monaco, and Switzerland. Israel is predominantly an intermediary nation except for the export of seaweed, tuna, and freshwater species-derived caviar. Nations are encouraged to identify and indicate the fish and fish products for which they are acting as intermediary nations.

**Nations that do not have a consistent history of exporting fish and fish products to the United States and are not included in the List of Foreign Fisheries**

In reviewing the import data, information submitted by nations, and readily available information, NMFS identified twenty-five trading partners that either exported solely freshwater species or had a sporadic or inconsistent export history with the United States. Table 1 summarizes the nations that NMFS has determined will not be included in the LOFF and are not subject to any of the requirements of the MMPA import rule. However, if any of these nations wish to export fish and fish products to the United States, they must contact NMFS and satisfy the requirements of the MMPA import rule.

**Table 1. Nations Suggested for Removal from the MMPA LOFF and the Justification for Removal.**

**Bolivia**

Justification-- Landlocked nation, low level of U.S. fish imports from Bolivia

Detail-- Landlocked nation. In 2006 & 2015, the U.S. imported fish and shellfish meal not for human consumption, and fish eggs only in 2006. In 2013, Bolivia exported seaweed to the U.S.

<http://www.st.nmfs.noaa.gov/commercial-fisheries/foreign-trade/>

<http://www.fao.org/fi/oldsite/FCP/en/bol/profile.htm>

<http://www.fao.org/fishery/facp/BOL/en>

**Bosnia Hercegovina**

Justification-- Export conch (2015), grouper, snapper, and swordfish (2003)

Detail-- Very small amount of coastline on the Adriatic Sea. "The role of maritime areas in the total national economy is very small. There are no exact figures on the performance of the economy but it is estimated (Strategy for development of tourism of Bosnia and Herzegovina) that the GDP from the maritime area of Bosnia and Herzegovina is less than 1 percent of the total GDP of the country (European Commission, 2014 H)"

Fisheries are artisanal and sold domestically or captured

for domestic aquaculture.

<http://www.fao.org/3/a-au016e.pdf>

<http://www.fao.org/fishery/facp/BIH/en>

### **Burkina Faso**

Justification—Landlocked; only export waxes

Detail--Have exported "waxes, may include spermaceti" to the U.S. in 2010, 2013, 2014, and 2016. Further consultation with NMFS Office of Science and Technology (S&T) and Customs and Border Protection (CBP) revealed that since cessation of commercial whaling and whale product imports, "waxes" encompasses waxes not derived from spermaceti whale oil, such as beeswax.

### **Cayman Islands**

Justification--Only toothfish exports which may be an error

Detail-- Consultations with S&T, CBP, and NOAA experts on the *Dissostichus* catch documentation scheme indicate that attribution of toothfish catch to Cayman Islands is likely a recording error of "last port" vs. "origin of product." NMFS contacted the Caymans, and they have no records of toothfish exports. Further, the catch documentation scheme ensures that toothfish cannot enter the United States without valid catch documentation.

**Central African Republic (CAR)**

Justification-- Landlocked, possible processor only

Detail-- Exported processed squid in 2016, lobster,

yellowfin and swordfish 2000-2001. Aquaculture for

domestic use only. <http://www.fao.org/3/a-au069e.pdf>

FAO indicates that CAR does not have an export market for fish products: Table 2

<http://www.fao.org/fishery/facp/CAF/fr>

**Chad**

Justification--Landlocked; Last 17 years only product exported was thickeners derived from seaweed (2015)

Detail-- Landlocked, local economy produces no exports of fish for human consumption to U.S. from Chad.

<http://www.fao.org/fishery/facp/TCD/fr>

**Christmas Island, territory of Australia**

Justification--During the last 17 years exports have been sporadic, clam or crab in 2002, 2003, 2004, 2007, fish liver, roe 2016

Detail--Australia indicated that no export fisheries originate from Christmas Island.

**Cocos Island**

Justification--Freshwater fish exports.

Detail-- Between 2000 and 2017, Cocos Island has exported



tilapia once to the U.S. Australia noted hand collection of giant clam for aquaculture and re-seeding in the waters around Cocos Island, but these products are not entering the U.S. via Cocos Island.

### **Ethiopia**

Justification-- Landlocked, only product exported is waxes

Detail--Consultation with NMFS S&T and CBP revealed that since cessation of commercial whaling and whale product imports, "waxes" encompasses wax that is not made from spermaceti whale oil, likely beeswax. Ethiopia confirmed the wax was beeswax.

Ethiopian fisheries are entirely from aquaculture with limited exports.

<http://www.fao.org/fishery/facp/ETH/en>

### **French Guiana**

Justification--Freshwater fish in 2016, no exports to the U.S. 2001-2015

Details-- Rule does not apply to freshwater fisheries.

### **Hungary**

Justification-- Landlocked; Seaweed and other algae, historically caviar (2014)

Details--Hungary has extensive inland capture fisheries, pond aquaculture, and fish farming. Carps are the most

popular fish species in capture fisheries (54%) and pond aquaculture (82%) while African catfish is the dominant fish in intensive fish farming. Inland waters have high value predator species such as pikes, catfish and pike perch, which were not exported to the U.S. Given the inland nature of Hungarian fisheries, the export of seaweed is likely from inland freshwater aquaculture and fish farming and is therefore not included under this rule.

**Kazakhstan**

Justification—Landlocked; Solely freshwater fisheries, some caviar

Details—The MMPA import rule does not apply to freshwater fisheries. The last U.S. import of caviar (aquaculture) was in 2010. Aquaculture is on the rise, but fish farming is expensive to maintain and consequently results in very few exports.

[ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI\\_CP\\_KZ.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_KZ.pdf)

**Kyrgyzstan**

Justification—Landlocked; Oysters, canned (2004), dolphinfish and tilapia (2013), marine fish (2015)

Details--In the last 17 years, U.S. importation records show imports for only the three years listed above.

Import reports/records may be an error, generally there are no consistent seafood imports to the U.S. from this nation.

**Macedonia**

Justification—Landlocked; Exported fish paste in 2016

Details--Exported fish paste (2016 and 2010), and processed tuna in 2010. Their fisheries are entirely freshwater, for which the rule does not apply.

*[ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI\\_CP\\_MK.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_MK.pdf)*

**Mali**

Justification—Landlocked, main export is waxes 2003 to 2015

Details-- Mali exported to the U.S. grouper and processed fish in 2009, and solely waxes were exported to the U.S. other years, with no exports to the U.S. between 2015-present.

*[ftp://ftp.fao.org/FI/DOCUMENT/fcp/fr/FI\\_CP\\_ML.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/fr/FI_CP_ML.pdf)* (in French)

**Moldova**

Justification—Landlocked; Export is aquaculture derived caviar

Details—Moldova exported tuna and caviar in 2012 and 2016, caviar only in 2015. FAO has no record of tuna or caviar

harvest in Moldova:

[ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI\\_CP\\_MD.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_MD.pdf)

It appears that most of the sturgeon caviar harvest is derived from aquaculture:

<http://www.aquatir.md/?lang=en> (and other google searches)

### **Mongolia**

Justification—Landlocked, freshwater fisheries only

Details-- Mongolia exported to U.S. seaweed unfit for human consumption in 2016 (processed product). No FAO fishery profile. The MMPA import rule does not apply to freshwater inland fisheries.

### **Montserrat**

Justification—freshwater aquaculture; No exports to U.S. from 2000-2017 with exception of tuna in 2012

Details—It appears that Montserrat has no active commercial tuna fishery ([http://waittinstitute.org/wp-content/uploads/2016/11/5\\_Montserrat-Fisheries-Assessment-final.pdf](http://waittinstitute.org/wp-content/uploads/2016/11/5_Montserrat-Fisheries-Assessment-final.pdf), and targeted searches), no FAO fishery profile

### **Serbia**

Justification—No exports 2000-17 with the exception of tuna in 2012

Details--Landlocked, Rule does not apply to freshwater aquaculture. No FAO fishery profile.

*([http://www.fao.org/fishery/countrysector/naso\\_serbia/en](http://www.fao.org/fishery/countrysector/naso_serbia/en)),*

Do not and have not fished for tuna as members of International Convention for the Conservation of Atlantic Tunas.

### **Slovakia**

Justification— Landlocked; Freshwater pond aquaculture.

Details-- U.S. does not import aquaculture product from Slovakia. The U.S. imported bigeye and yellowfin tuna in 2013 and pickled herring in 2014. Neither are products that Slovakia is likely harvesting or processing.

*[ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI\\_CP\\_SK.pdf](ftp://ftp.fao.org/FI/DOCUMENT/fcp/en/FI_CP_SK.pdf)*

### **Somalia**

Justification—U.S. imported shrimp in 2002, lobster (*Homarus* spp.) in 2004, and coral/shells in 2015

Details--The *Homarus* lobster is not native to the Indian Ocean; therefore, this product is likely a re-export or reporting error. Coral and shell fisheries are predominantly hand collection fisheries and have a remote likelihood of marine mammal interaction. NMFS was unable to find evidence of an existing shrimp fishery. Possible import recording issue as the U.S. is not actively importing any product from Somalia.

*(<http://www.fao.org/fi/oldsite/FCP/en/SOM/profile.htm>)*

**Tokelau Islands**, Territory of New Zealand

Justification—No commercial fisheries

Details--2000-2017 U.S. Trade Data shows records of exports of marine fish (2001, 2007, 2008, 2009) seabass (2010, 2011, 2012) and Bluefin tuna (2016). However, several reports indicate the absence of commercial fisheries operating in Tokelau (Dalzell *et al.*, 1996; Passfield, 1998). All fishing activities are subsistence. In addition, seabass is not a species found in Tokelau. Tokelau does not have the food safety regulations to export fish to another nation and is not a flag state or port state.

**Togo**

Justification—Few and inconsistent exports

Details-- We found evidence that Togo's fisheries for shrimp are subsistence, artisanal fisheries; likewise, Togo's tuna fisheries are solely artisanal fisheries with no current active industrial fishery although foreign-flagged and IUU vessels target tuna in Togo's waters. Togo's sardine fishery consists of industrial trawl and artisanal beach seine operations, with no evidence that these are commercial and exporting fisheries ([https://s3-](https://s3-us-west-)

[2.amazonaws.com/legacy.seaaroundus/doc/Researcher+Publications/dpaully/PDF/2015/Working+Papers/MarineFisheriesTogo.pdf](https://2.amazonaws.com/legacy.seaaroundus/doc/Researcher+Publications/dpaully/PDF/2015/Working+Papers/MarineFisheriesTogo.pdf)). Togo's snail (other than sea snail) are freshwater species for which the rule does not apply. Finally, the crustacean fishery is lagoon-based (artisanal and subsistence) with limited exports to international markets.

#### **Uganda**

Justification—Landlocked, only export freshwater species  
Details—From 2000-2009, U.S. Trade Data records show some processed marine fishery products imported to the U.S via Uganda; however from 2012 to 2017, exports have been exclusively Nile perch, a freshwater species for which the MMPA import rule does not apply.

#### **Uzbekistan**

Justification—Landlocked; Freshwater species only  
Details—No imports 2014-2017, in 2013 Uzbekistan exported freshwater species only; and, from 2009-2012, the predominant exports were freshwater fish species with some exports of processed “marine fish.” For freshwater species the MMPA import rule does not apply.

<http://www.fao.org/fishery/facp/UZB/en>

## **Assumptions Made in the Development of the LOFF**

### *Fishery Products*

NMFS assumed that seafood products imported by the U.S. between the years 2000 and 2017 would be a reasonable basis for the list of target species included in the draft LOFF for each harvesting nation, unless the nation indicated that the fishery no longer occurs, the species is a re-export, (e.g., because the nation is only the processor for that fish or fish product), or the reported export of that seafood species/product to the United States was a data reporting error. For those fish and fish products listed on the U.S. Trade database, NMFS initially assumed that a fishery was associated with those products and looked to exporting nations to confirm their status as either the harvesting nation, intermediary nation, or both.

NMFS assumed that species or products that were associated with a gear type were wild caught and not aquacultured, with one exception. Unless occurring in the wild in a given country, NMFS assumed tilapia was produced by aquaculture operation.

### *Area of Operation*

To the extent possible, NMFS listed a harvesting nation's fisheries that take place in a foreign Exclusive



Economic Zone (EEZ) or on the high seas under that harvesting nation's LOFF, rather than under the LOFF of the nation in whose EEZ the fishing took place.

*Hand Collection Fisheries for Corals, Sponges, Shells*

Where no information was provided by a nation and the U.S. has imported corals, sponges, and/or shells from that nation, these fisheries were designated as a gear type of "hand collection" and subsequently labelled an exempt fishery. There is limited aquaculture of corals for export, though aquaculture-raised coral would also be hand collected and labelled an exempt fishery.

*Duplication of Marine Mammal Interactions Based on Gear Type with No Associated Target Fishery Species*

Where nations did not indicate target species and failed to provide fishery information in the form of: (1) a gear type and associated marine mammal interaction, or (2) a gear type and specific area of operation with associated marine mammal interaction, NMFS assumed that any instance of that gear type for any target species, or that gear type operating in a specific area of operation for any corresponding target species also reported, had the same likelihood or prevalence of marine mammal interaction. Any species or bycatch numbers provided in these instances were

copied across target fisheries. Nations are encouraged to notice where duplication may have occurred and provide documentation to support changes to the bycatch species or bycatch estimates.

*Toothfish (Dissostichus spp.) Catch Documentation Scheme (CDS)*

Antarctic and Patagonian toothfish (*Dissostichus spp.*) are fished under a strict catch documentation scheme (CDS) in order to prevent trade in toothfish harvested in contravention of Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) Conservation measures. The CDS allows for supply chain tracking of toothfish from point of harvest. Only Members and nations that are Party to the Convention are permitted to participate in the CDS for toothfish with the exception of the Seychelles, which is the sole Non-Contracting Party (NCP), permitted to participate in the CDS. As in the case of the Cayman Islands discussed above, instances where the NOAA S&T and CBP import data indicated the U.S. received toothfish from an NCP were crosschecked against the CDS and were determined to likely be the result misreporting a vessel's "last port" as its "point of origin." As the U.S. already prohibits the importation of toothfish without a

valid *Dissostichus* Catch Document, NMFS discarded these cases from the LOFF. For more information, see <https://www.ccamlr.org/en/compliance/catch-documentation-scheme-cds>.

## **Summary**

NMFS reviewed information from or related to more than 160 trading partners. NMFS eliminated 25 nations from the LOFF (see Table 1 for a list of these nations and the rationale used for eliminating them from the LOFF). The draft LOFF is comprised of 138 nations for a total of 720 exempt and 3,270 export fisheries. The LOFF, an expanded LOFF containing references, a list of Intermediary nations and their associated products, and list of fisheries and nations where the rule does not apply can found at [www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html). An annotated bibliography with supporting references can be found at [www.nmfs.noaa.gov/ia/species/marine\\_mammals/mmpaloff.html](http://www.nmfs.noaa.gov/ia/species/marine_mammals/mmpaloff.html). *Impact of the LOFF on Largest Trading Partners by Volume and Value*

Below is a table containing the twenty largest imports by volume and value, an assessment of the data they provided, and their risk of marine mammal bycatch. NMFS

based its assessment of the quality of the data supplied by nations based on the completeness and amount of detail in the information provided. The number of export and exempt fisheries is a tally of those fisheries after NMFS analysis of the LOFF. The overall risk of marine mammal bycatch is based on the type of gear most prevalent in the nation's fisheries and the information provided by those nations related to marine mammal fisheries interactions.

Chile, Peru, Argentina, and Ecuador have large numbers of small gillnet, purse seine, and trawl vessels with marine mammal bycatch. Canada's pot fisheries for lobster and snow crab have high levels of large whale bycatch. Canada also has bycatch in its gillnet fisheries and permits the intentional killing of marine mammals in aquaculture operations. Indonesia, Thailand, and Vietnam have large processing and aquaculture sectors; their vulnerability lies in their apparent inability to assess and mitigate marine mammal bycatch. If these nations estimate their marine mammal bycatch or provide more detailed information about their fishery operations, NMFS may be able to reclassify as exempt additional fisheries.

The Russian Federation, Japan, Mexico, and China provided little to no information to enable a full

assessment of their fisheries and level of marine mammal risk. Japan's marine mammal bycatch is particularly large in its pound net fisheries, whereas the Russian Federation's bycatch is predominantly in its pot and trawl fisheries. Mexico's marine mammal bycatch includes its gillnet and trawl fisheries in the Gulf of Mexico and the Gulf of California. India's fishery bycatch is predominantly in its coastal gillnet fisheries which includes tens of thousands of vessels. Taiwan has bycatch in their longline fisheries and their drift gillnet fisheries. The United Kingdom has bycatch of harbor porpoise and common dolphins in gillnet and trawl fisheries.

Nations, some not on this list, with a high level of documented marine mammal bycatch include South Korea (pound nets and gillnets); New Zealand (all gear types, especially trawl); and Australia (trawl and longline). However, NMFS recognizes that this evaluation may be highly influenced by the advanced assessment capabilities of these nations. New Zealand and Norway may be the only nations to have currently calculated a bycatch limit. Norway's information demonstrates bycatch of harbor porpoise, gray seal, and

harbor seal in excess of the bycatch limit in its gillnet fisheries.

**Table 2. List of the twenty largest imports by volume and value and an assessment of the data they provided and their risk of marine mammal bycatch.**

<b>Nation</b>	<b>Quality of Data Supplied</b>	<b>Number of Export/Exempt Fisheries</b>	<b>Overall risk of Marine Mammal Bycatch</b>
Canada	Excellent	163/82	Average/High
China	Poor	110/3	Unknown
Indonesia	Fair	13/25	Low
Thailand	Fair	76/12	Average
Chile	Good	46/39	Average/High
India	Poor	24/2	Unknown
Vietnam	Fair	26/14	Low
Ecuador	Good	21/6	High
Mexico	Fair	40/24	Average
Russian Federation	Poor	114/0	Average/High
Japan	Poor	197/18	High
Philippines	Good	16/4	Low
Peru	Good	70/34	Average/High
Argentina	Good	65/9	Average
Iceland	Excellent	27/2	Average
Honduras	Poor	4/6	Unknown
Taiwan	Good	19/3	Average/High

South Korea	Excellent	604/44	High
New Zealand	Excellent	81/25	Average/High
United Kingdom	Good	56/8	Average/High

### **Request for Input**

In addition to the requested information in this *Federal Register* notice, NMFS is interested in receiving public comment and supporting documentation in response to the following:

1. Should all marine aquaculture involving lines, such as seaweed, mussels, oysters, and other shellfish be considered an exempt fishery? Why or why not?
2. Should net pen aquaculture for tuna be considered an exempt fishery? Why or why not?
3. Should net cage aquaculture for finfish be considered an exempt fishery? Why or why not?
4. Should lift net or other such nets be considered an exempt fishery? Why or why not?
5. Would nations prefer to submit their information in the form of a database?
6. Should nations with only exempt fisheries be allowed to apply for a comparability finding every eight years rather than every four years?

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